SECTION 3
PRE-INSTALLATION REQUIREMENTS

3.1 SITES. The DSRS and related COTS software will be implemented on a site-by-site basis. The COTS software marked in the "Run-Time Environment" column in Table 3-I must be installed to provide a run-time capability. Additionally, software marked in the "Development Environment" column must be installed to provide a development capability.

3.2 SOFTWARE INVENTORY. Table 3-I lists the COTS software required to support the installation of the DSRS and additional software needed to compile the DSRS. These software products must be installed according to the vendor's installation instructions for the hardware.

GNU ANSI C Compiler is available via anonymous FTP from FSF (Free Software Foundation). The Internet Protocol (IP) address to access the anonymous FTP is **www.ai.mit.edu**. This version is stored in the **pub/gnu** directory and in the **gcc<version>.tar.gz** file in that directory. NOTE: <version> will indicate the version of the compiler.

freeWAIS is available via anonymous FTP. freeWAIS is distributed from Clearinghouse for Networked Information Discovery and Retrieval. The IP address to access the anonymous FTP is **ftp.cnidr.org.**

3.3 FACILITIES. Although all the facilities listed below are not required for the DSRS and its related COTS support software installation, they must be available to properly implement and operate DSRS on a UNIX platform:

a. **Hardware and Firmware.** The system configuration addressed below should be considered the minimum configuration. The actual CPU size, disk storage and memory requirements will vary according to the number of users, number and size of the RAs and RA information in the system. The disk storage requirement includes adequate space to contain: DSRS executables, configuration files, utility files, unit and system test files, and source files. The disk storage may be computed by multiplying the expected number of RAs to be contained in the site's database by the average size of an RA. Quantities and models of peripheral equipment may also vary in accordance with individual site configurations.

3.3.1 DSRS Client for UNIX. The DSRS client for UNIX will require the following equipment configuration.

a. Sun 4 architecture

b. 500 MB minimum available disk storage

c. 16 MB memory (minimum).

3.4 SUPPORT SOFTWARE ENVIRONMENT.

a. Workstation supporting Sun 4 architecture running SunOS or Solaris with the minimum configuration:

(1) 16 MB of RAM (Random Access Memory)
(2) 500 MB of available disk (storage) capacity
(3) Tape Units (available within network)
Tape units are not an integrated part of the system; instead, they are peripheral to the operating system and are only used through it. The Sun 4 architecture will require a QIC-150 format or compatible tape drive to be used for software installation, creating backups, and to support tape copy extraction.
(4) CD-ROM
(5) Ethernet connection to the DDN/Internet
DSRS site computers require appropriate connections to the Internet to be able to perform remote extractions. This may include Ethernet hardware, routers, and appropriate assignment of Internet addresses.

b. Peripheral devices in sufficient quantity to provide adequate implementation support:

(1) X-terminals (for sites supporting users running the Motif DSRS)
(2) Laser, dot matrix or line printer
(3) Modems (for sites supporting dial-in users)

Adequate work space must be available for those SRP personnel who are to perform the COTS and the DSRS installation.

3.4.1 SunOS 4.1.3 Environment.

3.4.1.1 DSRS Server. Support software for the DSRS Server running on the Sun system is shown in Table 3-I.

Table 3-I. Support Software for the DSRS Server

Software	Runtime Environment	Development Environment	Installation Instructions Section
SunOS Version 4.1.3 (Solaris 1.1)	●	●	4.2.1.1
ORACLE7 Server Release 7.1.3.0.0	●	●	4.2.1.4
ORACLE SQL*Plus Release 3.1.3.4.1	●	●	4.2.1.5
ORACLE SQL*Net for TCP/IP Version 1.0	●	●	4.2.1.6
ORACLE PL/SQL Release 2.1.3.0.0.0	●	●	4.2.1.7
GNU ANSI C Compiler 2.3.3		●	4.2.2.1

Software	Runtime Environment	Development Environment	Installation Instructions Section
ORACLE Pro*C Release 1.6.4.0.0		●	4.2.2.6
freeWAIS - 0.5	●	●	4.2.1.9

3.4.1.2 DSRS for X/Motif. The support software for the DSRS X/Motif is shown in Table 3-II.

Table 3-II. Support Software for the DSRS for X/Motif

Software	Runtime Environment	Development Environment	Installation Instructions Section
SunOS Version 4.1.3 (Solaris 1.1)	●	●	4.2.1.1
Open Windows Version 3.0	●	●	4.2.1.2
OSF Motif Version 1.2.4	●		4.2.1.3
OSF Motif Version 1.2.2		●	4.2.2.4
Minerva MSQL RDBMS Version 1.0	●	●	4.2.1.8
XVT DSC++ Version 3.2		●	4.2.2.3
SPARCworks Professional C++, SPARCworks 3.0.1		●	4.2.2.7
SPARCompiler C++ 4.0.1		●	4.2.2.2
GNU ANSI C Compiler 2.3.3		●	4.2.2.1
XVT-Graphical Extensions 2.0		●	4.2.2.5
freeWAIS - 0.5	●	●	4.2.1.9

3.4.2 Solaris 2.3 Environment.

3.4.2.1 DSRS Server. Support software for the DSRS Server running on the Sun system is shown in Table 3-III.

Table 3-III. Support Software for the DSRS Server

Software	Runtime Environment	Development Environment	Installation Instructions Section
SunOS Version 5.3 (Solaris 2.3)	●	●	5.2.1.1
ORACLE7 Server Release 7.1.3.0.0	●	●	5.2.1.4

Software	Runtime Environment	Development Environment	Installation Instructions Section
ORACLE SQL*Plus Release 3.1.3.4.1	●	●	5.2.1.5
ORACLE SQL*Net for TCP/IP Version 1.0	●	●	5.2.1.6
ORACLE PL/SQL Release 2.1.3.0.0.0	●	●	5.2.1.7
SPARCworks-Pro-C 3.0.1		●	5.2.2.1
ORACLE Pro*C Release 1.6.4.0.0		●	5.2.2.5
freeWAIS - 0.5	●	●	5.2.1.9

3.4.2.2 DSRS for X/Motif. The support software for the DSRS X/Motif is shown in Table 3-IV.

Table 3-IV. Support Software for the DSRS for X/Motif

Software	Runtime Environment	Development Environment	Installation Instuctions Section
SunOS Version 5.3 (Solaris 2.3)	●		5.2.1.1
Open Windows Version 3.3	●		5.2.1.2
OSF Motif Version 1.2.2	●	●	5.2.1.3
Minerva MSQL RDBMS V1.0	●	●	5.2.1.8
XVT - DSC++ Version 3.2		●	5.2.2.3
SPARCworks Professional C++, SPARCworks 3.0.1		●	5.2.2.6
SPARCompiler C++ 4.0.1		●	5.2.2.2
SPARCworks-Pro-C 3.0.1		●	5.2.2.7
XVT-Graphical Extensions 2.0		●	5.2.2.4
freeWAIS - 0.5	●	●	5.2.1.9

3.5 COMMUNICATIONS REQUIREMENTS. The communications path between remote sites will take place over DDN/Internet for the UNIX system. Communications over DDN will be supported via TCP/IP Sockets. Dial-in users will require terminal emulation communications software that supports SLIP or PPP. The medium for dial-up terminals is a modem with voice-grade telephone lines. A graphical overview of the DSRS communications paths is displayed in Figure 3-1.

The Morning Star PPP V1.4.1 software has been installed and tested on a SunOS 4.1.3 environment. This software will provide the necessary PPP protocol to allow dial-in users using PPP-supported software to use both the Windows-based DSRS User Tool and the DSRS Librarian Tool.

Morning Star PPP software can be purchased from:

Morning Star Technologies, Inc.
3518 Riverside Drive, Suite 101
Columbus, OH, USA 43221-1754
1-614-451-1883 (voice)
1-800-558-7827 (voice)
1-614-459-5054 (fax)

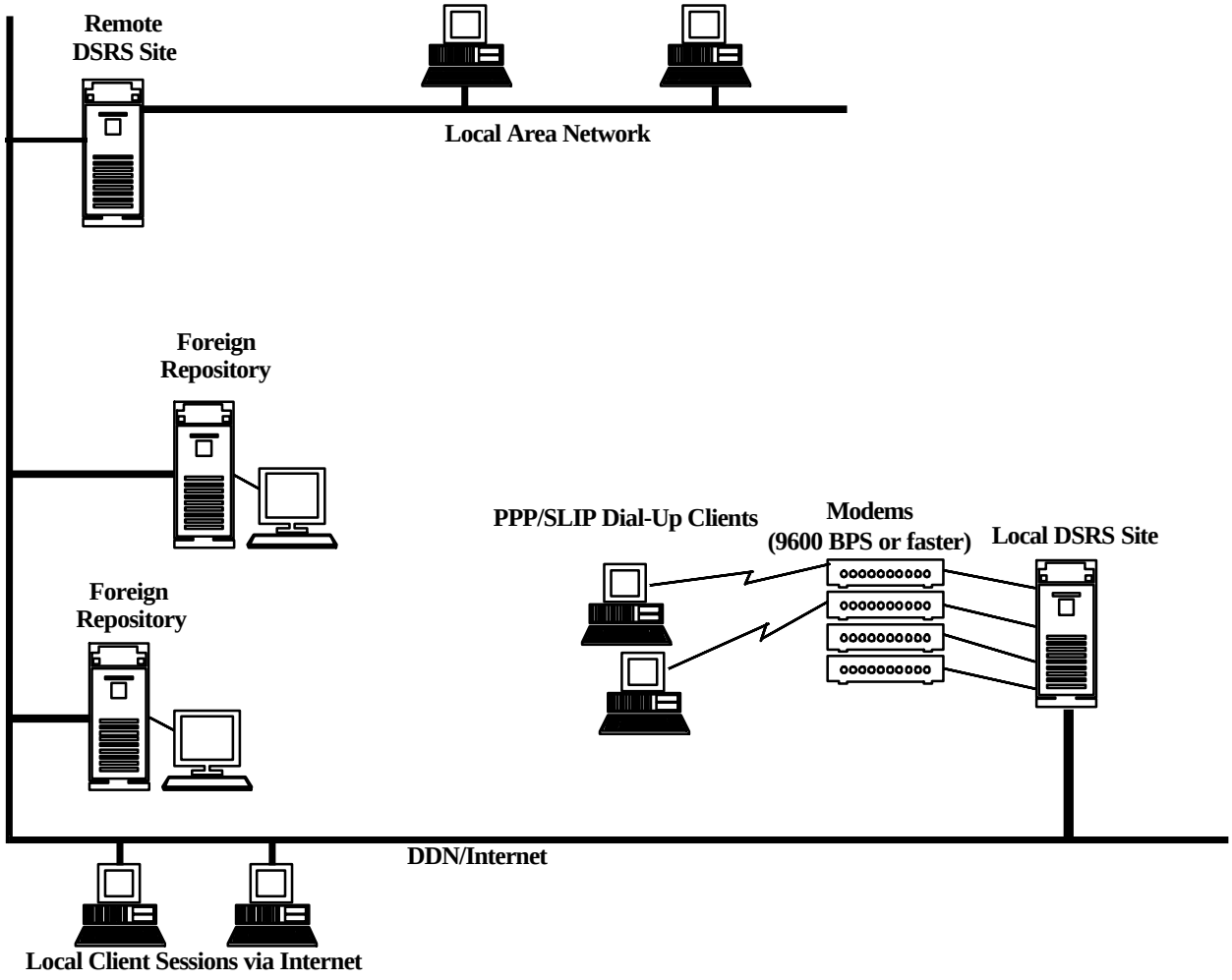

Figure 3-1. DSRS Communications Overview